Attitudes and Opinions About

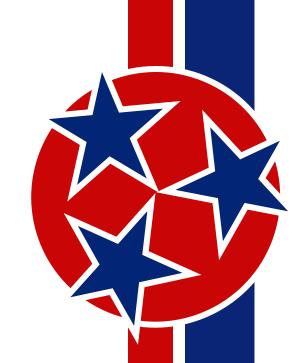
Higher Education in Tennessee

and

The Tennessee
Education Lottery
Scholarship Program



Presented by:
Social Science Research Institute
University of Tennessee, Knoxville
March, 2005



EXECUTIVE SUMMARY

With the new lottery-funded statewide college scholarship program, the public eye has turned more to higher education in Tennessee. In an effort to assess the public opinion of higher education in Tennessee, the Tennessee Higher Education Commission partnered with the Social Science Research Institute (SSRI) at the University of Tennessee, Knoxville to survey Tennesseans on their attitudes and opinions related to higher education. This study reports these perceptions in three broad themes: (1) general perception of Tennessee higher education, (2) perception of lottery participation, and (3) perceptions of the Tennessee Education Lottery Scholarship Program.

- **1. General Perception of Higher Education in Tennessee.** Results from the survey suggest that Tennesseans identify higher education as an important state resource and deem education worthy of increased state funding.
 - 62 percent of respondents think it is "very important" to have university in Tennessee regarded as a top university in the nation.
 - Less than 10 percent of all respondents rated any four-year university as "below average."
 - 80 percent indicated that the state should increase spending on education.
- **2. Perception of Lottery Participation.** While the percentage of survey respondents indicating that they played the Tennessee lottery was split nearly in half (46 percent reported that they had played the lottery this year; 54 percent had not), of respondents who both had played the lottery and of those who had not indicated an overwhelming majority knew that college scholarships were the primary beneficiary.
 - 90 percent of those who played the lottery responded that they were aware that lottery proceeds would be used to fund college scholarships.
 - 79 percent of those who had not played the lottery responded that they were aware that lottery proceeds would be used to fund college scholarships.
 - Nearly 60 percent of respondents who had played the lottery indicated that the lottery scholarships contributed "a great deal" or "some" to their decision to play the lottery.
 - 26 percent of respondents who had not played the lottery indicated that the lottery scholarships beneficiary would make them "more likely" to play the lottery.
- **3. Perception of the Tennessee Education Lottery Scholarship Program.** While most respondents identified education as the beneficiary of lottery revenues, respondents were less familiar with eligibility requirements for lottery scholarship recipients. In fact, of ten statements related lottery scholarships, respondents answered only 4.28 correctly, on average.

Opinions were positive related to whether or not the lottery scholarship program would meet its over-arching goals:

- 1. Increase access to college 87 percent agreed
- 2. Retain Tennessee's best and brightest students 64 percent agreed
- 3. Better prepared Tennessee workforce 65 percent agreed

TABLE OF CONTENTS

	Page
Executive Summary	ii
Introduction	1
Demographics of the Sample.	2
Importance of Education.	3
Opinions of Tennessee Colleges and Universities.	6
Spending on Education.	7
Costs of Higher Education.	8
Opinions about Financial Aid	9
Spending on State Services.	10
Lottery Participation.	11
Information about the Lottery	14
Opinions Concerning the Lottery	16
Information about Lottery Cross-Tabulations	18
Opinions Concerning the Lottery Cross-Tabulations	23
Lottery Participation Cross-Tabulations.	26

Introduction

The Social Science Research Institute at the University of Tennessee, Knoxville, conducted a telephone survey of adult residents of Tennessee regarding perceptions of institutions of higher education and awareness of the lottery scholarship program.

Additionally, respondents were asked about their spending preferences for education and other services provided by the state and the perceived impact of the scholarship program. The survey was conducted using Computerized Assisted Telephone Interviewing (CATI) system utilizing the Random Digit Dialing method. Advance letters were mailed to households for which addresses could be obtained. A total of 1,051 randomly-selected adult residents of Tennessee were interviewed with a resulting +/- 3 percent margin of error. The cooperation rate for the survey was 30 percent.

Demographics of the Sample

Region of State	WEST TENNESSEE MIDDLE TENNESSEE EAST TENNESSEE	25% 37% 38%
Race	BLACK WHITE OTHER	10% 87% 3%
Gender	MALE FEMALE	48% 52%
Education	HIGH SCHOOL OR LESS SOME COLLEGE COLLEGE DEGREE GRADUATE/PROFESSIONAL DEGREE	33% 28% 22% 17%
Income	LESS THAN \$15,000 \$15,000 - \$30,000 \$30,001 - \$50,000 \$50,001 - \$75,000 MORE THAN \$75,000 NOT SURE	12% 21% 23% 19% 20% 6%
Age	18-25 26-35 36-45 46-55 56-65 Over 65	8% 16% 18% 26% 15% 17%
Students in high School	Yes No	15% 85%
Students in College	Yes No	17% 83%
Lottery scholarship Recipients	Yes No Not Sure	20% 79% 2%

IMPORTANCE OF EDUCATION

Synopsis: Tennesseans apparently see intrinsic value in higher education, at least for their own children; fully four-of-five would prefer their child to go to college after high school, as opposed to attending vocational school, finding a job, etc. Further, if forced to choose between two equally-qualified employees, respondents showed a distinct preference for a college graduate over a vocational school graduate. However, over one-third say the type of education would not matter; indeed, only 36 percent of our sample would intentionally hire a college graduate over a vocational-technical student.

With respect to the importance ascribed to the amount of education a child should receive, nursery school is most likely to be rated "unimportant" A high school diploma is seen as "important" or "very important" by virtually *everyone*. About 90 percent think some sort of higher education is important, with a clear majority (56 percent) saying a college degree is "very important". It is striking that about 85 percent of respondents see graduate school as important or very important.

A majority of Tennesseans think it is important for Tennessee to have a top state university. About one-third see no difference in the quality of the education received at a public *vs.* private university, while another one-third would prefer a private school. With respect to two-year *vs.* four-year colleges, two-year schools are generally accorded less stature than four-year schools. And yet, when asked specifically about the first two years of college, over one-half of those who expressed an opinion would prefer a two-year school, or see no difference.

Finally, Tennesseans agree that, when extra funds are needed, student fees *and* state taxes should be raised, by about a four-to-one margin.

If you had a child just finishing high school, what would you prefer that their next step be...?

Go to work	3%
Go to vocational school	9%
Go to college	82%
Something else	3%
DK/NS	3%

If you were an employer with a job that could be filled equally well by either a vocational school graduate or a college graduate, which would you prefer to hire?

Vocational school graduate	22%
College graduate	36%
Doesn't matter	37%
DK/NS	5%

Some people have different opinions on how important education is. Thinking of a child in your own family, would you say that it is unimportant, important, or very important that the child go to the following types of schools?

	Nursery School	K-12	2-Year College	4-Year College	Graduate School
Unimportant	22%	1%	7%	4%	11%
Important	45%	17%	55%	38%	50%
Very Important	29%	82%	36%	56%	35%
Not Sure	3%	<1%	2%	2%	4%
N	1050	1051	1051	1049	1049

Considering the number of students graduating from college these days, would you say there are too many graduates for the jobs available, not enough graduates, or about the right number of graduates for the jobs available?

Too many	32%
Not enough	31%
About right	26%
DK/NS	11%

How important is it that the state of Tennessee have a university which is regarded among the top state universities in the country?

Unimportant	6%
Somewhat important	31%
Very important	62%
DK/NS	1%

Do you think a person gets a better education in a state university or in a private university?

State university	19%
Private university	34%
No difference	35%
DK/NS	12%

Where do you think the average young person can get a better education—in a small college or in a large university?

Small college	51%
Large university	20%
No difference	23%
DK/NS	6%

For the first two years of college, would a young person get a better education in a two-year community college or in a four-year college?

Two-year college	33%
Four-year college	44%
No difference	16%
DK/NS	7%

When extra money is needed to pay for state-supported colleges and universities in Tennessee, where do you think the money should come from—student fees, state taxes, or a combination of both?

Student fees	7%
State taxes	10%
Both	79%
DK/NS	4%

OPINIONS OF TENNESSEE COLLEGES AND UNIVERSITIES

Synopsis: Respondents were asked to rate institutions of higher education in Tennessee; the results of these rankings are presented below. Clearly, Vanderbilt is seen as the premier university in Tennessee, with 80 percent ranking it as "Above Average". The Knoxville campus of the University of Tennessee is next, with 57 percent rating UTK as above average. Over 90 percent of respondents were able offer an assessment of Vanderbilt and UTK; no other college or university in Tennessee was ranked by as many as 80 percent of respondents, and several were ranked by only two-thirds of the sample. Beyond the "Top Two", Tennessee Tech was the highest rated school, with 31 percent judging it as above average.

Interestingly, respondents were loathe to denigrate Tennessee's colleges and universities. No school was rated as "Below Average" by as much as 10 percent of the sample. The high proportions responding "Don't Know" or "Not Sure" when asked to rank the colleges outside of Vanderbilt and UTK may reflect a lack of information, *or* an unwillingness to give a negative assessment.

	Above Average	Average	Below Average	Don't Know/Not Sure	_ N
Vanderbilt	80%	10%	<1%	9%	1048
UTK	57%	32%	2%	9%	1049
TN Tech	31%	44%	4%	21%	1049
UT-Memphis	30%	38%	3%	28%	1049
MTSU	25%	50%	4%	21%	1049
Austin Peay	20%	43%	4%	33%	1048
UTC	18%	49%	4%	29%	1049
Memphis	18%	45%	5%	31%	1049
ETSU	17%	45%	5%	33%	1049
UT-Martin	16%	46%	5%	33%	1049
Tenn. State	14%	48%	9%	29%	1049

SPENDING ON EDUCATION

Synopsis: Respondents support, by substantial margins, increased spending for K-12 education and vocational training; and, to a lesser extent, for two-year colleges. Tennesseans favor maintaining current levels of funding for four-year colleges; comprehensive universities; and, medical and dental schools. Very few respondents report a desire to decrease spending on education in Tennessee.

State spending on education covers a variety of types of education. For each of the following types of education, please tell me whether the state should increase spending, decrease spending, or keep spending at the current level.

	Increase	Maintain	Decrease	Not Sure	N
K-12	76%	21%	2%	1%	1051
2-Year Colleges	52%	41%	4%	3%	1051
Vocational Training	66%	28%	2%	3%	1051
4-Year Colleges	44%	46%	6%	4%	1051
Universities	44%	44%	6%	6%	1050
Med./Dent. Schools	41%	47%	7%	5%	1051

COSTS OF HIGHER EDUCATION

Synopsis: An overwhelming proportion of Tennesseans perceive that the cost of higher education in the state has risen sharply over the past five years. While a majority disagree with the assertion that leaders of higher education are not concerned about rising costs, a majority also feel that costs can be cut without sacrificing quality. A plurality think that legislators are not concerned about the costs of a college education. Clearly, Tennesseans do not blame one single group for these increasing expenses.

I'm going to read a series of statements that refer to issues facing higher education institutions in general. As I mention each, tell me if you agree or disagree with that statement.

If federal income tax laws are changed, private gifts to colleges should remain tax deductible at present levels.

Agree	85%		
Disagree	8%		
DK/NS	7%		

The cost of attending a public university in Tennessee has risen sharply over the last five years.

Agree	84%
Disagree	6%
DK/NS	10%

Leaders in higher education in Tennessee are not concerned about the costs of going to college.

Agree	39%
Disagree	53%
DK/NS	8%

Public universities in Tennessee can cut costs without affecting the quality of the education they provide students.

Agree	54%
Disagree	39%
DK/NS	6%

Members of the Tennessee State Legislature are not concerned about the costs of going to college.

Agree	46%
Disagree	43%
DK/NS	11%

OPINIONS ABOUT FINANCIAL AID

Synopsis: With the exception of race-based aid, respondents were fairly supportive of financial aid programs for higher education. Over 80 percent feel race should not play a part in decisions concerning financial aid. Two-thirds say the Federal government should be involved in financial aid; a similar proportion rejects the idea that aid should be in the form of loans rather than grants. Tennesseans think need-based financial aid is desirable, as 58 percent disagree with the suggestion that scholarships should be based only on academic achievement.

The race of the student should be considered as a factor when granting financial aid to students.

Agree	16%
Disagree	82%
DK/NS	2%

The federal government needs to get out of the student financial aid business.

Agree	27%
Disagree	66%
DK/NS	7%

Financial aid to students should be given in the form of loans rather than grants.

Agree	31%
Disagree	64%
DK/NS	5%

Scholarships should be based only on academic achievement.

Agree	40%
Disagree	58%
DK/NS	2%

Thinking back over the past year, have you contributed money to any college or University in Tennessee?

Yes	32%		
No	67%		
DK/NS	1%		

SPENDING ON STATE SERVICES

Synopsis: With the possible exception of welfare programs, Tennesseans do not favor cutting spending on state programs and services. Support for education stands out, with 80 percent supporting increased spending. Majorities also support increased spending for mental health services, medical services, and law enforcement. Tennesseans are less likely to support increased spending for highways, welfare programs and agricultural programs.

As you know, the taxes paid by Tennesseans are spent by the state government in various ways. For each of the following services...please tell me whether the state should increase spending, decrease spending, or keep spending at the current level.

	Increase	Maintain	Decrease	Not Sure	N
Highways	32%	52%	13%	3%	1051
Welfare	20%	41%	32%	7%	1051
Agriculture	33%	43%	13%	11%	1049
Mental					
Health	50%	36%	4%	10%	1050
Medica1					
Services	59%	27%	8%	6%	1048
Education	80%	15%	3%	2%	1051
Environment	48%	40%	7%	6%	1051
Law					
Enforcement	58%	33%	6%	3%	1051

LOTTERY PARTICIPATION

Synopsis: Just under half of our respondents, 46 percent, report having played the lottery during the first year of its existence. Among these respondents, 90 percent said they were aware that post-secondary scholarships would be funded by the lottery; and over one-half of these said that knowledge played some part in their decision to play.

Among those who have played the lottery, 87 percent reported having played more than once; but a majority report playing less than once a week. Finally, almost all (89 percent) say they will play the lottery again.

Over one-half of the sample, 56 percent, say they have not played the state lottery in Tennessee. Among this group, two-thirds say they have no plans to play in the future. When asked why they had not played, respondents were most likely to cite moral reasons; but a large segment, 31 percent, simply haven't given the matter much thought, reporting no particular reasons for not playing. Most (79 percent) of the respondents who have not played the lottery report having known what the proceeds would be used for; when informed of this, only a quarter of those who did not know thought it would make a difference with respect to their playing in the future.

Have you played the Tennessee state lottery this year?

Yes	46%
No	54%
DK/NS	<1%

The following questions were asked of those who said they had played the lottery.

Proceeds from the state lottery will be used to fund scholarships for higher education. Were you aware of this when you first played the lottery? N=486

Yes	90%
No	10%
DK/NS	<1%

If 'Yes' to previous question: How much of an effect did knowing this have on your decision to play the lottery...? N=437

A great deal	29%
Some	29%
Not much at all	42%
DK/NS	<1%

Have you played the Tennessee state lottery just one time, or more than once? N=486

One time	13%
More than once	87%
DK/NS	<1%

If 'More than once': How often would you say that you play the lottery...? N=421

Every day	1%
Several times a week	13%
At least once a week	27%
Less than once a week	57%
DK/NS	2%

Regardless of how frequently you play the lottery, do you think you will continue to play in the future? N=486

Yes	89%
No	7%
DK/NS	4%

The following questions were asked of those who said they had *not* played the lottery.

Do you think you will ever play the state lottery in the future? N=561

Yes	23%
No	67%
DK/NS	10%

Would you say there is a particular reason why you have not played the lottery? (**If** "Yes': What would that reason be? N=547

No particular reason	31%
Moral reason given	42%
Bad public policy	7%
Low odds of winning	17%
DK/NS	4%

Proceeds from the Tennessee state lottery will be used to fund scholarships for higher education. Were you aware of this when you decided not to play? N=560

Yes	79%
No	19%
DK/NS	2%

If 'No' to previous question: Would knowing this make you more or less likely to play in the future, or would it not have any effect on whether or not you will play? N=117

More	26%
Less	17%
No effect	54%
DK/NS	3%

INFORMATION ABOUT THE LOTTERY

Synopsis: We asked respondents a number of questions to determine how much factual information they had about the recently-enacted state lottery, and the higher education scholarships to be funded by the lottery. Information levels are not especially high, not surprising, perhaps, given that the lottery was less than one year old when the survey was conducted. Only 41 percent knew the lottery would fund higher education scholarships, while another 23 percent know "education" would be funded. Over 35 percent of respondents did were not aware of where lottery proceeds would go.

With respect to specific aspects of the lottery, we asked ten factual questions. The options given respondents included "True", "False" and "Not Sure". In this discussion, "Not Sure" responses were combined with the "Incorrect" category.

The highest number of questions any respondent answered correctly was eight questions; further, only 3 percent answered as many as eight correctly. Respondents were most often correct on the first two questions, below, having to do with general eligibility and use. Respondents were least likely to know that scholarships could be used for higher education expenses other than tuition and fees. A majority of respondents did not know that students could lose their lottery scholarships before graduation, nor that eligibility for receiving a scholarship involves more than graduating from high school. The median number of correct responses was five, and the average correct was 4.28—less than half the number of questions asked.

The state of Tennessee recently established a state lottery. Do you know what will be funded by the proceeds from the lottery?

YesHigher Education Scholarships	41%
YesEducation;	
no mention of scholarships or level	23%
YesOther than education	3%
No	31%
DK/NS	2%

Now I would like to read a list of statements about the scholarships funded by the Tennessee lottery. For each one, tell me whether the statement is true or false.

Only residents of Tennessee are eligible to receive lottery scholarships.

Percent correct = 76%

Lottery scholarships must be used in Tennessee.

Percent correct = 78%

Lottery scholarships may be used at private colleges and universities.

Percent correct = 50%

Students who are home-schooled are not eligible to receive lottery scholarships.

Percent correct = 51%

Lottery scholarships must be used at a four-year college or university.

Percent correct = 52%

Any high school graduate from Tennessee may receive a lottery scholarship. **Percent correct = 42%**

Lottery scholarships may be used for any expenses directly related to attending college, not just for tuition and fees.

Percent correct = 29%

Lottery scholarships may be used to attend technical schools after high school. **Percent correct = 50%**

Once students receive a lottery scholarship, they may keep them until they graduate from college.

Percent correct = 39%

Lottery scholarships may be used at two-year, or community colleges. **Percent correct = 65%**

Summary of number of correct answers to previous questions

Number Correct	Percent
8	3%
7	8%
6	18%
5	21%
4	19%
3	14%
2	7%
1	4%
0	6%
N	1047

Average Number Correct = **4.28**

OPINIONS CONCERNING THE LOTTERY

Synopsis: Given that the Tennessee lottery was enacted through a popular referendum to amend the State Constitution, it is not surprising to learn that less than one-fourth (23 percent) of respondents report opposition to the lottery. Irrespective of their support of or opposition to the lottery, Tennesseans see generally positive outcomes from the lottery scholarship program. Substantial majorities believe that lottery scholarships will keep more top students in Tennessee for college; will result in more students going to college who could not otherwise afford to do so; will lead to a better-prepared workforce; and will produce more first-generation college students.

Tennesseans tended to agree with the assertion that the lottery scholarship program will improve the quality of colleges and universities in the state. They did not, however, agree that the program would improve the reputation of Tennessee's institutions of higher education.

The state of Tennessee recently established a state lottery... Would you say you support the lottery, are opposed to it, or are you neutral? (Follow-up questions were asked to assess degree of support/opposition.)

Strongly supportive	26%
Supportive	21%
Neutral	29%
Opposed	6%
Strongly Opposed	17%
DK/NS	<1%

Now I would like to ask for your opinions about the effects of the Tennessee lottery scholarships. For each of the following statements, please tell me if you agree, disagree, or if you're not sure...

Lottery scholarships will result in more top students staying in Tennessee for college.

Agree	64%
Disagree	20%
DK/NS	16%

Lottery scholarships will result in more students going to college who could not otherwise afford to go.

Agree	87%
Disagree	8%
DK/NS	5%

Lottery scholarships will improve the quality of colleges and universities in Tennessee.

 Agree
 45%

 Disagree
 38%

 DK/NS
 18%

Lottery scholarships will improve the reputations of colleges and universities in Tennessee.

 Agree
 35%

 Disagree
 45%

 DK/NS
 20%

Lottery scholarships will lead to a better-prepared workforce.

 Agree
 65%

 Disagree
 21%

 DK/NS
 14%

Lottery scholarships will lead to more students going to college whose parents did not go to college.

 Agree
 85%

 Disagree
 8%

 DK/NS
 7%

INFORMATION ABOUT THE LOTTERY CROSSTABULATIONS

Synopsis: In the following tables we present the distributions of the various information items from the survey across categories of age, race and region of the state. For ease of exposition we have numbered the specific information items.

Respondents were first asked if they knew what would be funded by the lottery. The ability to answer this question correctly is a function of age, race and region; differences within each variable are all statistically significant. Except for those over age 65, older respondents were more likely to answer this question correctly. So, too, were whites, and respondents from Middle Tennessee.

We turn now to the specific information items, and the differences within each of the classificatory variables. With the exception of item #3, age impacts the ability to answer these questions correctly. Specifically, older respondents are more likely to give a correct answer than are younger respondents. The invariable exception to this pattern is found among the oldest age group, with the ability to answer these questions correctly falling off for those over age 65.

Turning to race, there are no statistically significant differences between African Americans and whites with respect to answering correctly items #1, #3, #5, #6 and #8. On the remaining items, whites were more likely to give a correct response than were African Americans, with one exception, that being item #7. Blacks were more likely than whites to know that lottery scholarships can be used for educational expenses other than tuition and fees.

With respect to region, this variable has virtually no impact on the ability to answer these information items correctly. Indeed, on only one question item #5, are the differences across regions statistically significant. There, we see that residents of Middle Tennessee are the ones most likely to know that lottery scholarships are not restricted to four-year institutions.

The final table in this section shows the mean number of correct responses for ach group, as well as F-tests for differences within each of the three variables. Only the differences across age categories are statistically significant at the (conventional) .05 level of probability. Interestingly, the age cohort with the highest average number of correct responses is the 18-25 group; while the cohort with the lowest average number of correct responses is the oldest group, those over age 65.

The state of Tennessee recently established a state lottery. Do you know what will be funded by the proceeds from the lottery?

	Totals	18- 25*	26- 35	36- 45	46- 55	56- 65	Over 65	Black@	White	East TN#	Mid. TN	West TN
Higher												
Ed.	41%	22%	42%	39%	47%	51%	33%	31%	42%	31%	49%	42%
School.												
Education	23%	21%	24%	25%	25%	19%	21%	17%	24%	29%	18%	20%
Incorrect	3%	4%	2%	3%	4%	3%	5%	0	4%	3%	4%	3%
No	31%	51%	30%	31%	22%	24%	39%	51%	28%	33%	27%	33%
DK/NS	2%	2%	1%	2%	2%	3%	2%	2%	2%	2%	2%	2%

*
$$\chi^2$$
 for Age = 46.06, df = 20, p = .001
@ χ^2 for Race = 23.86, df = 4, p < .001
χ^2 for Region = 31.90, df = 8, p < .001

Now I would like to read a list of statements about the scholarships funded by the Tennessee lottery. For each one, tell me whether the statement is true or false.

1. *Only residents of Tennessee are eligible to receive lottery scholarships.*

	Totals	18- 25*	26- 35	36- 45		56- 65	Over 65	Black@	White	East TN#	Mid. TN	West TN
Correct	76%	72%	80%	78%	77%	80%	68%	70%	77%	75%	79%	73%
Incorrect	24%	28%	20%	22%	23%	20%	32%	30%	23%	25%	21%	27%

*
$$\chi^2$$
 for Age = 11.16, df = 5, p < .05
@ χ^2 for Race = 2.94, df = 1, p = .09
χ^2 for Region = 3.62, df = 2, p = .16

2. Lottery scholarships must be used in Tennessee.

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
Correct	78%	61%	85%	79%	80%	81%	70%	67%	79%	78%	79%	73%
Incorrect	22%	39%	15%	21%	20%	19%	30%	33%	21%	22%	21%	27%

*
$$\chi^2$$
 for Age = 27.32, df = 5, p < .001
@ χ^2 for Race = 8.19, df = 1, p = .004
χ^2 for Region = 3.32, df = 2, p = .19

3. Lottery scholarships may be used at private colleges and universities.

	Totals	18- 25*		36- 45				Black@	White	East TN#	Mid. TN	West TN
	7 00/							520 /	510 /			
Correct	50%	55%	51%	51%	54%	51%	43%	53%	51%	52%	50%	48%
Incorrect	50%	45%	49%	49%	46%	49%	57%	47%	49%	48%	50%	52%

*
$$\chi^2$$
 for Age = 5.56, df = 5, p = .35

(a)
$$\chi^2$$
 for Race = .20, df = 1, p = .66

$$\chi^2$$
 for Region = .86, df = 2, p = .65

4. Students who are home-schooled are not eligible to receive lottery scholarships.

	Totals	18- 25*	26- 35	36- 45		56- 65		Black@	White	East TN#	Mid. TN	West TN
Correct	51%	61%	49%	57%	55%	47%	42%	42%	53%	50%	53%	51%
Incorrect	49%	39%	51%	43%	45%	53%	58%	58%	47%	50%	47%	49%

*
$$\chi^2$$
 for Age = 15.41, df = 5, p = .01

(a)
$$\chi^2$$
 for Race = 4.68, df = 1, p < .03

$$\chi^2$$
 for Region = 1.03, df = 2, p = .60

5. Lottery scholarships must be used at a four-year college or university.

	Totals	18- 25*	26- 35	36- 45		56- 65		Black@	White	East TN#	Mid. TN	West TN
Correct	52%	52%	52%	58%	58%	49%	42%	41%	54%	49%	57%	51%
Incorrect	48%	48%	48%	42%	42%	51%	58%	59%	46%	51%	43%	49%

*
$$\chi^2$$
 for Age = 12.92, df = 5, p = .02

②
$$\chi^2$$
 for Race = 7.22, df = 1, p = .07

$$\chi^2$$
 for Region = 6.11, df = 2, p < .05

6. Any high school graduate from Tennessee may receive a lottery scholarship.

	Totals	18-		36-				Black@	White			
		25*	35	45	55	65	65			TN#	TN	TN
Correct	42%	41%	39%	46%	46%	51%	31%	40%	43%	40%	46%	40%
Incorrect	58%	59%	61%	54%	54%	49%	69%	60%	57%	60%	54%	60%

*
$$\chi^2$$
 for Age = 17.41 df = 5, p = .004

@
$$\chi^2$$
 for Race = .31, df = 1, p = .58

$$\chi^2$$
 for Region = 4.27, df = 2, p = .12

7. Lottery scholarships may be used for any expenses directly related to attending college, not just for tuition and fees.

	Totals	18- 25*	26- 35	36- 45		56- 65		Black@	White	East TN#	Mid. TN	West TN
Correct	29%	50%	33%	31%	24%	29%	21%	40%	27%	28%	32%	27%
Incorrect	71%	50%	67%	69%	76%	71%	79%	60%	73%	72%	68%	73%

* χ^2 for Age = 26.88 df = 5, p < .001 @ χ^2 for Race = 8.25, df = 1, p = .004 # χ^2 for Region = 1.99, df = 2, p = .37

8. Lottery scholarships may be used to attend technical schools after high school.

	Totals	18- 25*	26- 35	36- 45	46- 55	56- 65		Black@	White	East TN#	Mid. TN	West TN
Correct	50%	63%	48%	48%	56%	45%	42%	48%	49%	51%	49%	48%
Incorrect	50%	37%	52%	52%	44%	55%	58%	52%	51%	49%	51%	52%

* χ^2 for Age = 16.78, df = 5, p = .005 @ χ^2 for Race = .06, df = 1, p = .81 # χ^2 for Region = .98, df = 2, p = .61

9. Once students receive a lottery scholarship, they may keep them until they graduate from college.

	Totals	18- 25*	26- 35	36- 45	46- 55	56- 65	Over 65	Black@	White	East TN#	Mid. TN	West TN
Correct	39%	27%	40%	44%	43%	38%	32%	32%	40%	37%	40%	40%
Incorrect	61%	73%	60%	56%	57%	62%	68%	68%	60%	63%	60%	60%

* χ^2 for Age = 12.95, df = 5, p = .02 @ χ^2 for Race = 2.63, df = 1, p = .10 # χ^2 for Region = .89, df = 2, p = .64

10. Lottery scholarships may be used at two-year, or community colleges.

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
Correct	65%	69%	66%	66%	72%	62%	52%	52%	67%	65%	67%	61%
Incorrect	35%	31%	34%	34%	28%	38%	48%	48%	33%	35%	33%	39%

* χ^2 for Age = 20.99, df = 5, p = .001 @ χ^2 for Race = 9.17, df = 1, p = .002 # χ^2 for Region = 2.87, , df = 2, p = .24

Average Number of Correct Responses

	Totals	18- 25*	26- 35		46- 55		Over 65	Black@	White	East TN#	Mid. TN	West TN
Average	4.28	4.56	4.38	4.48	4.50	4.32	3.58	4.00	4.33	4.22	4.46	4.11
N	1047	82	168	188	268	154	173	106	898	398	393	256

^{*} F for Age = 6.08, df = 5, p <.001 @ F for Race = 2.80, df = 1, p <.1 # F for Region = 2.80, df = 2, p =.06

OPINIONS CONCERNING THE LOTTERY CROSSTABULATIONS

Synopsis: In the following tables we show the effects of age, race and region on support for the Tennessee lottery, as well as on several opinion questions concerning the effects of the lottery. Beginning with support for the lottery, the first table indicates that the two youngest cohorts are most supportive of the lottery, while those over age 65 are least likely to support it. Whites are more supportive than African Americans, who are more likely to claim a neutral stance. Residents of Middle Tennessee are most supportive and East Tennesseans the least supportive.

We will next examine each opinion question in turn, which have been numbered for ease of exposition. On the first question, the only statistically significant difference is that across regions; specifically, West Tennesseans are less likely than those from the rest of the state to think that the lottery scholarships will result in more top students staying for college in Tennessee. On the other hand, all the differences observed on the second question are statistically significant. In particular, whites are more likely than blacks to think that lottery scholarships will allow students to attend college who could not otherwise afford to do so; West Tennesseans are least likely to express this viewpoint.

On the third question, all differences are statistically significant. A majority of the youngest cohort thinks the lottery scholarship program will improve the quality of colleges and universities in Tennessee. So, too, does a majority of African Americans, and residents of East Tennessee. Turning to the fourth item, the only statistically significant differences observed are those across regions. West Tennesseans are least likely to think that the reputations of Tennessee's colleges and universities will improve with the lottery scholarship program.

Will lottery scholarships lead to a better-prepared workforce? Item #5 addresses this issue. We see differences within all three variables. The youngest age cohort is most likely to agree with this proposition, as are whites and residents of East Tennessee. Finally, all three variables impact a respondent's opinion concerning first generation college students. Whites are more likely to think the program will produce more first generation college students, while West Tennesseans are least likely to hold this opinion. The pattern for age is a bit muddled, with the only notable difference being that between the oldest age cohort and all other respondents.

The state of Tennessee recently established a state lottery... Would you say you support the lottery, are opposed to it, or are you neutral?

	Totals	18- 25*	26- 35	36- 45	46- 55	56- 65	Over 65	Black@	White	East TN#	Mid. TN	West TN
Support	47%	52%	53%	49%	52%	42%	34%	41%	48%	46%	52%	41%
Oppose	23%	16%	15%	20%	20%	27%	35%	18%	24%	21%	22%	28%
Neutral	29%	31%	31%	30%	28%	30%	29%	40%	28%	31%	26%	30%

^{*} χ^2 for Age = 32.26, df = p < .01 @ χ^2 for Race = 7.49, df = 3, p < .06

[#] χ^2 for Region = 14.29, df = 6, p = .03

Now I would like to ask for your opinions about the effects of the Tennessee lottery scholarships. For each of the following statements, please tell me if you agree, disagree, or if you're not sure...

1. Lottery scholarships will result in more top students staying in Tennessee for college.

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
Agree	64%	68%	65%	66%	63%	64%	61%	60%	64%	66%	66%	56%
Disagree	20%	17%	21%	21%	23%	18%	16%	19%	21%	18%	21%	24%
DK/NS	16%	15%	13%	13%	13%	18%	22%	21%	15%	16%	13%	20%

*
$$\chi^2$$
 for Age = 12.79, df = 10, p = .24
@ χ^2 for Race = 2.36, df = 2, p = .31
χ^2 for Region = 10.87, df = 4, p = .03

2. Lottery scholarships will result in more students going to college who could not otherwise afford to go.

	Totals	18-	26-	36-	46-	56-		Black@	White	East		West
		25*	35	45	55	65	65			TN#	TN	TN
Agree	87%	91%	84%	88%	87%	91%	83%	76%	88%	89%	89%	79%
Disagree	8%	4%	10%	9%	9%	6%	6%	10%	8%	7%	7%	11%
DK/NS	5%	5%	6%	3%	4%	3%	10%	13%	4%	4%	4%	10%

*
$$\chi^2$$
 for Age = 19.45, df = 10, p = .03
@ χ^2 for Race = 16.99, df = 2, p < .001
χ^2 for Region = 18.64, df = 4, p = .00

3. Lottery scholarships will improve the quality of colleges and universities in *Tennessee*.

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
Agree	45%	54%	49%	43%	50%	41%	35%	54%	43%	50%	43%	39%
Disagree	38%	38%	38%	39%	37%	39%	35%	26%	40%	32%	41%	41%
DK/NS	18%	8%	14%	18%	14%	20%	29%	20%	17%	19%	16%	20%

*
$$\chi^2$$
 for Age = 29.87, df = 10, p = .001
@ χ^2 for Race = 7.28, df = 2, p = .03
χ^2 for Region = 12.21, df = 4, p = .02

4. Lottery scholarships will improve the reputations of colleges and universities in *Tennessee*.

	Totals	18- 25*	26- 35	36- 45	46- 55	56- 65	Over 65	Black@	White	East TN#	Mid. TN	West TN
Agree	35%	45%	37%	36%	37%	30%	29%	35%	35%	40%	35%	27%
Disagree	45%	41%	46%	47%	44%	44%	44%	41%	46%	38%	49%	49%
DK/NS	20%	13%	17%	17%	18%	25%	27%	24%	19%	22%	16%	24%

*
$$\chi^2$$
 for Age = 16.92, df = 10, p = .08
@ χ^2 for Race = 1.40, df = 2, p = .50
χ^2 for Region = 19.14, df = 4, p = .001

5. Lottery scholarships will lead to a better-prepared workforce.

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
Agree	65%	71%	62%	66%	71%	64%	61%	57%	67%	70%	63%	61%
Disagree	21%	19%	27%	18%	19%	19%	22%	29%	20%	16%	24%	23%
DK/NS	14%	10%	10%	16%	10%	17%	17%	14%	13%	13%	12%	16%

*
$$\chi^2$$
 for Age = 16.95, df = 10, p = .07
② χ^2 for Race = 5.46, df = 2, p = .06
χ^2 for Region = 10.63, df = 4, p = .03

6. Lottery scholarships will lead to more students going to college whose parents did not go to college.

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
Agree	85%	84%	87%	86%	87%	86%	79%	77%	86%	87%	87%	78%
Disagree	8%	12%	10%	8%	8%	6%	7%	10%	8%	6%	9%	11%
DK/NS	7%	4%	2%	6%	5%	8%	14%	12%	6%	6%	5%	11%

*
$$\chi^2$$
 for Age = 25.45, df = 10, p = .005
@ χ^2 for Race = 7.48, df = 2, p = .02
χ^2 for Region = 14.12, df = 4, p = .007

LOTTERY PARTICIPATION CROSSTABULATIONS

Synopsis: We will confine our remarks to a few specific tables, since the observed differences in many of these tables are not statistically significant. With respect to playing the lottery, respondents over age 65 are by far the least likely to report having played the lottery. Middle Tennessee shows the highest participation rates, and West Tennessee, the lowest. There is no difference in participation between blacks and whites.

Those who reported playing, and not playing, the lottery were asked distinct sets of questions. In general, few differences emerged in any of these tables, whether confined to lottery participants or non-participants. Indeed, only one table reflects any differences of note. Specifically, non-participants were asked if they thought they would ever play the lottery in the future. The youngest respondents, African Americans, and Middle Tennesseans were more likely to respond in the affirmative.

Have you played the Tennessee state lottery this year?

	Totals	18- 25*	26- 35	36- 45				Black@	White	East TN#	Mid. TN	West TN
Yes	46%	52%	56%	50%	49%	44%	28%	48%	46%	45%	54%	36%
No	54%	48%	44%	50%	51%	56%	72%	52%	54%	55%	46%	64%

*
$$\chi^2$$
 for Age = 37.76, df = 10, p < .001
@ χ^2 for Race = .18, df = 2, p = .9
χ^2 for Region = 21.21, df = 4, p < .001

Proceeds from the state lottery will be used to fund scholarships for higher education. Were you aware of this when you first played the lottery?

	Totals	18- 25*	26- 35	36- 45	46- 55		Over 65	Black@	White	East TN#	Mid. TN	West TN
Yes	90%	74%	87%	89%	93%	96%	92%	88%	90%	90%	90%	89%
No	10%	26%	13%	11%	7%	4%	8%	12%	10%	10%	10%	11%

*
$$\chi^2$$
 for Age = 19.95, df = 10, p = .03
@ χ^2 for Race = .30, df = 2, p = .86
χ^2 for Region = 1.80, df = 4, p = .77

If 'Yes' to previous question: How much of an effect did knowing this have on your decision to play the lottery...?

	Totals	18- 25*	26- 35	36- 45	46- 55	56- 65	Over 65	Black@	White	East TN#	Mid. TN	West TN
Great Deal	29%	25%	24%	31%	32%	34%	16%	36%	27%	32%	27%	26%
Some	29%	28%	33%	29%	30%	20%	32%	22%	30%	27%	31%	26%
Not Much	42%	47%	43%	39%	38%	46%	48%	42%	42%	40%	42%	48%

*
$$\chi^2$$
 for Age = 20.08, df = 15, p = .17
 @ χ^2 for Race = 2.04, df = 3, p = .56

Have you played the Tennessee state lottery just one time, or more than once?

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
Once	13%	19%	10%	15%	12%	7%	17%	14%	12%	16%	11%	11%
More	87%	81%	90%	85%	88%	93%	83%	86%	88%	84%	89%	89%
Than												
Once												

*
$$\chi^2$$
 for Age = 14.17, df = 10, p = .16

②
$$\chi^2$$
 for Race = .18, df = 2, p = .91

If 'More than once': *How often would you say that you play the lottery...?*

	Total	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
>Weekly	14%	0	2%	2%	1%	13%	15%	20%	13%	11%	17%	12%
Weekly	27%	11%	9%	12%	15%	37%	28%	18%	29%	31%	25%	24%
< Weekly	57%	69%	57%	54%	63%	47%	54%	57%	57%	56%	55%	61%
DK/NS	2%	0	1%	2%	0	3%	3%	4%	1%	1%	2%	2%

^{*} χ^2 for Age = 17.72, df = 20, p = .60

@
$$\chi^2$$
 for Race = 5.74, df = 4, p = .22

$$\chi^2$$
 for Region = 4.96, df = 8, p = .76

[#] χ^2 for Region = 7.67, df = 6, p = .26

[#] χ^2 for Region = 4.45, df = 4, p = .35

Regardless of how frequently you play the lottery, do you think you will continue to play in the future?

	Totals	18- 25*	26- 35	36- 45	46- 55	56- 65	Over 65	Black@	White	East TN#	Mid. TN	West TN
Yes	89%	79%	97%	97%	93%	79%	77%	84%	91%	87%	91%	87%
No	7%	14%	2%	2%	3%	10%	15%	12%	5%	8%	7%	4%
DK/NS	4%	7%	1%	1%	4%	10%	8%	4%	4%	4%	2%	8%

*
$$\chi^2$$
 for Age = 35.56, df = 10, p < .001

(a)
$$\chi^2$$
 for Race = 3.76, df = 2, p = .15

The following questions were asked of those who said they had *not* played the lottery.

Do you think you will ever play the state lottery in the future?

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
Yes	23%	38%	31%	24%	25%	16%	16%	36%	22%	20%	31%	18%
No	67%	49%	61%	65%	69%	73%	72%	57%	69%	65%	63%	74%
DK/NS	10%	13%	8%	11%	6%	10%	12%	7%	9%	14%	6%	8%

^{*} χ^2 for Age = 16.82, df = 10, p = .08

(a)
$$\chi^2$$
 for Race = 5.64, df = 2, p = .06

$$\chi^2$$
 for Region = 17.84, df = 4, p = .001

Would you say there is a particular reason why you have not played the lottery? (**If "Yes":** What would that reason be?

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
No	31%	46%	27%	33%	35%	23%	28%	37%	30%	34%	31%	27%
Moral	42%	30%	40%	39%	38%	45%	50%	41%	42%	45%	36%	44%
Policy	7%	3%	3%	9%	7%	11%	4%	2%	7%	5%	8%	8%
Odds	17%	19%	22%	17%	16%	19%	13%	13%	17%	13%	20%	18%
DK/NS	4%	3%	8%	2%	4%	2%	4%	7%	4%	3%	4%	4%

*
$$\chi^2$$
 for Age = 23.80, df = 20, p = .25

(a)
$$\chi^2$$
 for Race = 5.04, df = 2, p = .28

$$\# \chi^2$$
 for Region = 9.03, df = 8, p = .34

[#] χ^2 for Region = 7.11, df = 4, p = .13

Proceeds from the Tennessee state lottery will be used to fund scholarships for higher education. Were you aware of this when you decided not to play?

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
Yes	79%	64%	80%	76%	88%	84%	73%	71%	80%	77%	80%	81%
No	19%	31%	19%	24%	9%	14%	26%	27%	18%	21%	17%	18%
DK/NS	2%	5%	1%	0	2%	2%	2%	2%	2%	2%	2%	1%

*
$$\chi^2$$
 for Age = 22.79, df = 10, p = .01
@ χ^2 for Race = 2.73, df = 2, p = .25

If 'No' to previous question: Would knowing this make you more or less likely to play in the future, or would it not have any effect on whether or not you will play?

	Totals	18-	26-	36-	46-	56-	Over	Black@	White	East	Mid.	West
		25*	35	45	55	65	65			TN#	TN	TN
More	26%	57%	53%	35%	19%	7%	9%	25%	26%	26%	28%	26%
Less	17%	7%	0	9%	19%	14%	32%	12%	18%	16%	11%	26%
No	54%	29%	47%	56%	62%	64%	59%	63%	53%	54%	58%	48%
Effect												
DK/NS	3%	7%	0	0	0	14%	0	0	3%	4%	3%	0

^{*} χ^2 for Age = 38.53, df = 15, p = .001

[#] χ^2 for Region = 1.62, df = 4, p = .80

⁽a) χ^2 for Race = .99, df = 2, p = .80

[#] χ^2 for Region = 3.71, df = 6, p = .71